

EKINCAN UFUKTEPE

<https://ekincanufuktepe.github.io/>

University of Missouri-Columbia, 222A Naka Hall, Columbia, MO, 65211

318 Nikki Way, Columbia, MO, 65203

EDUCATION

Izmir Institute of Technology

June 2019

Ph.D. in Computer Engineering

Thesis: Test Case Prioritization for Regression Testing by Using Change Impact Analysis

Advisor: *Dr. Tugkan Tughular*

Izmir Institute of Technology

July 2014

M.Sc. in Computer Engineering

Thesis: Measurement of JavaScript Applications' Readiness to Untrusted Data Using Bayesian Networks

Advisor: *Dr. Tugkan Tughular*

Izmir University of Economics

June 2011

B.Sc. in Computer Engineering

Thesis: An Investigation of Image Processing Features Using Neural Networks in SAR Remote Sensing Classification

Advisor: *Dr. Turker Ince*

EXPERIENCE

University of Missouri - Columbia

August 2019 - Present

Adjunct Professor - Teaching

Columbia, MO

Teaching - Fall '19

- *Real-time Embedded Computing*
- *Principles of Programming Languages*

Teaching - Spring '20

- *VHDL and Programmable Logic Devices*
- *Software Design in C and C++*

University of Missouri - Columbia

July 2019 - Present

Research Scholar

Columbia, MO

Columbia College

August 2019 - Present

Adjunct Professor - Teaching Fall '19

Columbia, MO

- *Software Engineering*

Izmir Institute of Technology

March 2012 - June 2019

Research/Teaching Assistant

Izmir, Turkey

- Teaching and Lab preparation for undergraduate students.
- Homework and Lab assignment preparation.
- Homework, Lab assignment and quiz evaluation.

SAP Labs

March 2013 - August 2013

Intern

Mougins, France

- Participated a project on preventing input validation vulnerabilities on server-side web applications on SAP HANA Cloud.
- Developing and improving an Eclipse plug-in for input validation analysis and policy generation.
- Creating the architecture and UML diagrams of the project.
- Documentation of software development process and user manual.

Izmir University of Economics
Student Assistant

February 2011 - May 2011
Izmir, Turkey

- Assisted *Probability and Stochastic Processes* course as a student assistant.
- Homework preparation and evaluation.

Universidad de Cantabria, App. Math. & Compt. Sciences
Intern

June 2010 - August 2010
Santander, Spain

- Participated project *Santadeuorpa*.
- The project included game development, graphic and computer game designing by using artificial intelligence with UDK (Unreal Development Kit).

Vestel, R & D Dept.
Intern

August 2009 - September 2009
Manisa, Turkey

- Developing Google Gadgets and Yahoo Widgets by using JavaScript for IPTVs.
- Developing a RSS based Daily News reporting using Google Gadgets and Yahoo Widgets

TECHNICAL STRENGTHS

Computer Languages	Java, C/C++, Python, JavaScript, PHP, Scheme/Racket,
Protocols & APIs	XML, JSON, DOT
Databases	MySQL, PostgreSQL
Application Programs	MATLAB, Eclipse, Netbeans, MS Office, OpenOffice/Libre Office, PolSARPro, MS Visual Studio, CodeBlocks, Graphviz.
Tools	Web Scarab, W3AF, PMD, TAJIS
Cloud Platforms	JetStream

PUBLICATIONS

Journals

1. Ufuktepe E., Tuglular T., *Predicting Future Code Changes with Probabilistic Graphical Models*, 2020 (In preparation)
2. Ufuktepe E., Tuglular T., *Application of law of minimum and dissimilarity analysis to Regression Test Case Prioritization*, 2020 (Under Review)
3. Ufuktepe E., Tuglular T., *Estimating Software Robustness in Relation to Input Validation Vulnerabilities using Bayesian networks*, Software Quality Journal, 2018

Conferences

1. Kavzak Ufuktepe D., Ufuktepe E., Ayav T., *A Metric for Test Case Generation Quality of Test Generation Methods for Boolean Expressions*, 2020 (Under Review)
2. Ufuktepe E., Ramtekkar V., Gao K., Al-Shakarji N., AliAkbarpour H., Seetharaman G., Palaniappan K., *Rapid training data generation for visual tracking*, SPIE, Geospatial Informatics X, 2020
3. Ufuktepe E., Tuglular T., *A Program Slicing-based Bayesian Network Model for Change Impact Analysis*, IEEE International Conference on Software Quality, Reliability and Security (QRS), 2018
4. Ufuktepe E., Tuglular T., *Automation Architecture for Bayesian Network Based Test Case Prioritization and Execution*, Computer Software and Applications Conference (COMPSAC), 2016 IEEE 40th Annual
5. Ufuktepe E., Tuglular T., *Measurement of JavaScript Applications' Readiness against Untrusted Data Using Bayesian Networks (In Turkish)*, 7th International Conference on Information Security and Cryptography, ISC 2014
6. Ufuktepe E., Tuglular T., *Input Validation Analysis for JavaScript Libraries (In Turkish)*, 9. National Software Engineering Symposium, UYMS 2015 (**Best Paper**)
7. Toksoy M., Sofuoğlu, S. C., Ekren O., Ufuktepe, E., Varlik N., *Determining Ventilation in Classrooms (In Turkish)*, 12. Ulusal Tesisat Mühendisliği Kongresi, Izmir, 2015

PATENTS

1. *An Approach to Measure a Software's Robustness*, Turkish Patent Institute, **Document ID:** 2015-GE-492476 (Pending), Ufuktepe E., Tuglular T.,
2. *A Program Slicing and Bayesian Network Based Approach to Predict Future Changed Methods in a Software's Next Version*, Turkish Patent Institute, (Pending), Ufuktepe E., Tuglular T.,

TRAINING ACTIVITIES

Cyber Carpentry Workshop

July 14, 2019 - July 27, 2019

Post-doc

University of North Carolina - Chapel Hill (UNC), NC

This workshop has been funded by the National Science Foundation (NSF) under the CyberTraining program. The overarching goal of the CyberTraining program is to prepare, nurture, and grow the national scientific workforce for creating, utilizing, and supporting advanced cyberinfrastructure (CI) that enables cutting-edge science and engineering and contributes to the nation's overall economic competitiveness and security. The workshop training included:

- How to publish reproducible science.
- How to make your scientific study reusable.
- How to use HPC and Cloud systems (JetStream and AWS Cloud), using docker containers and singularities.
- How to use machine learning tools (KNIME, SageMaker).

The project I did with my team in the workshop is given in the link below

<https://github.com/ekincanufuktepe/group1-machine-learning-project>

AWARDS

1. Incentive Award in area of Biology, 1 - 4 May 2007, 16. MEF Competition of Research Projects.
2. Honorary Mention Award in area of Biology, 2 June 2006, D.E.Ü. Faculty of Engineering and Uğur Dershaneleri
3. Competition of Science and Engineering Projects.
3. Finalist in area of Biology, 2006, 36. TÜBİTAK Competition of Secondary Education Students Research Projects.